

REMARKS

Applicants previously presented claims 39-51, 56 and 57 for examination. In the above-identified Office Action, the Examiner has allowed claims 40 and 44 if rewritten in independent form, which Applicants acknowledge with gratitude; and rejected claims 39, 41-43, 45-51, 56 and 57.

Applicants appreciate the Examiner's detailed comments in the Office Action, which allows Applicants to be able to understand the Examiner's reasons and grounds for the rejections. For the reasons to be stated below, however, Applicants respectfully traverse the Examiner's rejections.

By this amendment, Applicants have (a) amended claims 39, 43, 45, 46, 49, 50, 51, 56 and 57 to further clarify the subject matter regarded as the invention; (b) deleted claim 48; (c) recast claims 40 and 44 in independent form by incorporating all the limitations of their base claim 39, with minor clarification; (d) withdrawn claims 52-55 and 58; and (e) added new claims 59-63. Accordingly, claims 39-47, 49-51, 56, 57 and 59-63 remain pending. Reconsideration is respectfully requested based on the amendments and remarks expressed herein. Applicants believe that no additional fees are required for the application.

Patentability of Claimed Invention

The Office Action rejected claims 39, 41-43, 45-51 and 56-57 under 35 U.S.C. 102(b) as being anticipated by Liverance (US 5,370,399). Applicants respectfully disagree.

In general, Liverance pertains to playing games with incentive producing mechanisms, as shown, for example, by the title of the patent, "Game Apparatus Having Incentive Producing Means," and the first sentence of Liverance's Summary of the Invention, which states that "The present invention relates to slot machines and other machines for playing various types of computer and arcade games...."¹

In terms of its applications to learning a subject, Liverance discusses playing an education game, for example, as follows:

"The present invention can be used to play an education game such as the type incorporated into computer systems for the purpose of tutoring or testing individuals in

¹ Col. 2, lines 5-7.

various subjects on a personal basis.”² Based on the education game, “the ability level of the player can be determined by how quickly and accurately he answers questions such that the difficulty of subsequent questions can be adjusted to a reasonably challenging level.”³ “For purposes of illustration, a fundamental multiple choice vocabulary routine has been developed.... Its function is to test student ability based on previously studied material, the unique nature of this education game is that it creates a parameter representing the virtual grade level of the student from the ratio of correctly answered questions to the total number of questions asked.”⁴ The “invention may be applied to various types of computer education games involving different subjects.... In each case, the student is led to believe he is progressing even if his level is below normal or if it drops from one question to the next.”⁵

In contrast, claim 39 pertains to a method for assisting a user to learn a subject, with the method including analyzing a timing regarding an input by the user, and, in response to the analysis, adjusting an audio effect regarding presenting materials on the subject. Liverance does not teach or suggest such limitations. Accordingly, it is submitted that claim 39 is patentable distinct from Liverance.

As to the newly-added claim 59, it pertains to a method for assisting a user to learn a subject, with the method including analyzing a timing regarding an input by the user, and, in response to the analysis, adjusting a visual effect regarding presenting materials on the subject. In rejecting claim 48, the Office Action stated that, “Liverance discloses wherein adjusting the materials presented comprises adjusting at least one of the following in response to the analysis of the timing: a visual effect regarding the materials (e.g., targets made bigger or controlled graphic symbols made more maneuverable), and an audio effect regarding presenting the materials.” As support, the Office Action cited Col. 9, lines 35-39 and 43-46 in Liverance. Applicants respectfully disagree. That section of Liverance is on playing a video game.

² Col. 30, lines 9-12.

³ Col. 2, lines 28-32.

⁴ Col. 30, line 64 to col. 31, line 3, with emphasis added.

⁵ Col. 33, line 19 to col. 34, line 16.

Liverance's video games solve different problems, use different techniques and get different results, as compared to Liverance's educational games, as shown, for example, in the following:

"FIG. 1b shows the apparatus of the present invention as used in a video game. This type of game is characterized by a video screen containing graphic symbols..."⁶ "The object of the game is to control at least one symbol in a predetermined manner. This may include shooting down a spacecraft with a missile, or accurately guiding a racecar through an obstacle course."⁷ "If a less competent player is at the controls, the game may be slowed down, targets made bigger or controlled graphic symbols made more maneuverable, thereby changing the symbol display. These changes make the game easier and give the operator an opportunity to attain a higher reward as recorded by the accounting device. If the player perceives he is doing well, he has a greater incentive to continue to play the game than if he does poorly. Thus, the symbols have been changed by the processor based upon player input through the player operating device, which has an actuatable control member, to maintain the desired level of player incentive."⁸

Liverance's techniques applied to its video games--making targets bigger or symbols more maneuverable--are not applicable to its education games, as illustrated, for example, by the following table:

	Liverance's Video game	Liverance's Educational game
Different context	Video game to control one symbol in a preset manner	Education game based on answering questions ⁹
Solve different problems	How to speed up a less competent player in playing the game	How to determine "the student's ability level and rate of improvement" ¹⁰
Use different techniques	Make the targets bigger or symbols more maneuverable	Determine "how quickly and accurately he answers questions" ¹¹
Get different results	Make the game easier	"[T]he difficulty of subsequent questions can be adjusted to a reasonably challenging level" ¹²

⁶ Col. 8, lines 62-64, with emphasis added.

⁷ Col. 9, lines 1-5, with emphasis added.

⁸ Col. 9, lines 35-47, with emphasis added.

⁹ Col. 2, lines 29-30.

¹⁰ Col. 30, lines 44-46.

¹¹ Col. 2, line 31.

Not only is there no reason to apply Liverance's video game techniques of making targets bigger or symbols more maneuverable to Liverance's education games or programs, such techniques cannot be applied to Liverance's education games or programs.

Since Liverance does not teach or suggest a method for assisting a user to learn a subject, with the method including analyzing a timing regarding an input by the user, and, in response to the analysis, adjusting a visual effect regarding presenting materials on the subject, it is submitted that claim 59 is patentable distinct from Liverance.

Claim 56 pertains to assisting a user to learn a subject over two or more sessions. The only section the Office Action cited in Liverance as support for Liverance providing such teachings was Col. 2, lines 40-44, which is reproduced as follows:

“By monitoring player score and response time to machine stimulus, it is possible to adjust the difficulty of the game to a level suitable to the player thereby maintaining his interest for substantially longer periods of time than with a conventional game.”

The above section in Liverance does not teach or suggest assisting a user to learn a subject over two or more sessions, with the method including analyzing the timing of an input during a session, taking into consideration the timing of an input by the user during another session. Thus, it is submitted that claim 56 is patentable distinct from Liverance.

Based on the foregoing, Applicants submit that claims 39, 56 and 59 are patentably distinct from Liverance. In addition, it is submitted that their dependent claims 41-43, 45-47, 49-51, 57 and 60-63 are also patentably distinct for at least the same reasons. Additional limitations recited in the independent claims or the dependent claims are not further discussed as the above-discussed limitations are sufficient to distinguish the claimed invention from Liverance. Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 39, 41-43, 45-47, 49-51, 56 and 57 under 35 USC §102.


¹² Col. 2, lines 31-32.

The remaining references cited in the Office Action have not been applied against any of the claims and do not appear properly applicable thereto. Thus, no further mention thereof will be made.

Reconsideration of the application and an early Notice of Allowance are earnestly solicited. Also, the Commissioner is hereby authorized to charge underpayment of any fees associated with this communication to Deposit Account No: 50-0727.

In the event that the Examiner, upon reconsideration, determines that an action other than an allowance is appropriate, the Examiner is requested and authorized to telephone Applicants' representative named below prior to taking such action, if the Examiner feels that such a telephone call will advance the prosecution of the present application.

Respectfully submitted,

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